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AUTHOR Gower, Amy L.; Hohmann, Lisa M.; Gleason, Terry C.; Gleason, Tracy R.

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ABSTRACT

Research on preschoolers' friendships has focused on superficial similarities but has not examined whether similarities exist between friends in personality characteristics such as temperament. This study examined the hypothesis that friends would have similar temperaments and that the relationship between temperament and friendship would be strengthened by age. Participating in the study were 75 children from 2 preschools who completed a sociometric interview. Also, the children's teachers completed a temperament questionnaire for each child. Regression analyses revealed that children's best friends and friends had levels of activity similar to those of the target child, and that soothability and impulsivity played only minor roles in preschool children's friendships. Findings were examined in the context of the changing role of temperament in children's peer relationships over time. (KB)

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The Relation Among Temperament, Age, and Friendship in Preschool-Aged Children

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Amy L. Gower, Lisa M. Hohmann, Terry C. Gleason, and Tracy R. Gleason

Wellesley College

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Abstract

Research on preschoolers' friendships has focused on superficial similarities but has not examined whether similarities exist between friends in personality characteristics such as temperament. We hypothesized that friends would have similar temperaments and that the relationship between temperament and friendship would be strengthened with age. Seventy-five children from two preschools completed a sociometric interview, and teachers completed a temperament questionnaire for each child. Regression analyses revealed that children's best friends and friends had similar levels of activity to the target child's own, and that soothability and impulsivity play only minor roles in preschool children's friendships. Findings are discussed in the context of the changing role of temperament in children's peer relationships over time.

Research on the role of similarity in preschool friendships has shown that friend dyads are more similar than non-friend dyads on the basis of age, gender, race, socioeconomic status, and family structure (Drewry & Clark, 1985; Furman and Bierman, 1983; Hayes, 1978). Although these studies have not specifically examined the relation between personality variables, such as temperament, and early friendships, evidence from research on sibling and peers suggests a possible link between temperamental characteristics and relationships. Activity level, for example, has been shown to play an important role in sibling relationships. Sibling dyads with dissimilar levels of activity experience more conflict than those with similar activity levels (Stoneman & Brody, 1993). Research has also demonstrated links between impulsivity, social competence, and disliking. Impulsive preschoolers are less liked by their peers and less socially competent than non-impulsive preschoolers (Olson, 1989). Certain aspects of temperament, such as activity level and negative affect, have also been linked to aggression, a factor in peer disliking in preschool. Children high in surgency (a temperament measure of which activity level and impulsivity are both components) tend to score highly on measures of aggression, as do children high in negative affect (Rothbart, Ahadi & Hershey, 1994).

The present study explored the relationship between preschool friendships and three aspects of temperament: activity level, impulsivity, and soothability. Because similarity in temperamental characteristics has been shown to be a factor in children's harmonious relationships, best friend and friend dyads were predicted to score more similarly on the three temperamental characteristics than dyads of children who were not friends. In addition, because preschool children's friendships become more complex and stable with age (Cooney & Selman, 1978), temperament and age were predicted to interact in friendships. The temperaments of

older best friend dyads were predicted to be more similar, and the temperaments of older disliked peer dyads more dissimilar, than those of younger dyads.

Method

Participants included 75 children (40 girls, 35 boys) enrolled in five classrooms in two suburban preschools. Children ranged from 43 months to 69 months (M= 54 months). Children's teachers also participated. Teachers in each classroom were asked to work together to complete a temperament questionnaire (adapted from Rothbart, 1989) that evaluated three components of children's temperament: activity level, soothability, and impulsivity. Each component was assessed using four statements, which teachers rated on a 5-point scale as true or not true of each child. Children identified one best friend and two other friends through the use of a sociometric interview. Of the three friends indicated by each child, one was considered a best friend (designated by the child). In order to allow for comparisons between friends and nonfriends, teachers provided the name of a peer with whom each child least liked to play (least-liked peer).

Coding

The questionnaires were scored by calculating the mean value of the four items related to each temperament component. T-tests indicated that the temperament scores of each child's two (non-best) friends did not differ significantly (ps > .10). Scores of these two friends were therefore averaged to form a mean "friend" score for each of the three aspects of temperament. The impulsivity scores were reversed such that high scores meant low impulsivity.

In preparation for regression analyses, age was centered by subtracting the mean age of all participants from the child's age. Temperament scores were centered by subtracting the mean score on each temperament characteristic from the child's temperament score for that characteristic. An age x temperament interaction term was computed for each temperament

characteristic by multiplying each child's centered age score by his/her centered temperament score.

Reliability

Alphas were computed for each of the three temperament subscales, showing acceptable reliability for all three scales (activity level, $\alpha = .92$; impulsivity, $\alpha = .83$, soothability, $\alpha = .81$).

Results

Several models relating the temperament characteristics of the target's choice of best friend, friend, and least-liked peer were tested using the temperament characteristic and age of the target. Those models with the best fit for the least number of predictors are shown in the tables.

Best Friend

The activity level of a child's best friend was best predicted by the activity level of the target child (see Table 1). Children had best friends with levels of activity similar to their own. The impulsivity of a child's best friend was best accounted for by the age of the target child. Older children preferred less impulsive best friends than younger children did. The soothability of a child's best friend was also best accounted for by the age of the target child. Older children's best friends were more soothable than were younger children's.

Friends

The activity level of a child's friend was best predicted by both the activity level of the target child and the age by activity level interaction (see Table 2). Children chose friends with levels of activity similar to their own, and this pattern was stronger for older children than for younger children. The best model for predicting the impulsivity of a child's friend included the impulsivity and age of the target child. Children chose friends that had levels of impulsivity

similar to their own, and older children chose less impulsive friends than did younger children. The soothability of a child's friend was best accounted for by the age of the target. Older children's friends were more soothable than were younger children's.

Least-liked Peers

Age was the sole predictor of least-liked peers' activity levels (see Table 3). Older children's least-liked peers had lower activity levels than did younger children's. The impulsivity of children's least-liked peers was also best accounted for by the age of the target child. Younger children were more likely to have least-liked peers with high levels of impulsivity than were older children. The soothability of a child's least-liked peer was best accounted for by the age of the target. Older children had least-liked peers who were more soothable than were younger children's least-liked peers.

Discussion

The results of this study partially support the hypothesis that friendship, age, and certain temperamental characteristics are related in early childhood. Temperamental similarities and differences between target children and their best friends, friends, and least-liked peers will be discussed in turn, followed by consideration of these relationships in comparison to one another.

Best Friends

Overall, the results indicated that best friends were similar to target children on activity level, decreasingly impulsive with age, and increasingly soothable with age. The age-related changes in best friends' impulsivity and soothability are probably a function of the children's increasing maturity. Impulsivity typically decreases with age (McCormick & Schnobrich, 1970) whereas soothability typically increases over the preschool years. Thus, only activity level appears to be playing a significant role in children's relationships with best friends. Moreover,

in contrast to the original hypothesis, the lack of interaction between age and activity level suggests that the match between best friends' activity levels is equally important for younger and older preschool children.

Friends

A child's friend's activity level was best predicted by the target child's activity level and the interaction between the target's age and activity level. This pattern suggests that children have friends whose activity levels match their own, and that this match becomes increasingly important with age. A somewhat similar process was at work for impulsivity; friends tended to be similar to target children for this temperamental characteristic. Furthermore, the inclusion of age in the best model for predicting a friend's impulsivity implies that friends' impulsivity decreases with age. Likewise, as age was the most powerful predictor of soothability for friends, children's friends appear to be more soothable with age. Thus, in addition to choosing friends who are similar to themselves on activity level and impulsivity, children appear to be choosing friends with typical levels of impulsivity and soothability for their classroom.

Least-Liked Peers

The hypothesis that the temperaments of least-liked peers would be dissimilar to that of the target child was not supported. Contrary to expectations, a child's activity level, impulsivity, and soothability were unrelated to that of his/her least-liked peer. However, for the latter two temperamental characteristics, the age differences that emerged were consistent with those for friends and best friends—the results indicate that older children's least-liked peers were less impulsive and more soothable than the least-liked peers of younger children. As for activity level, children do not appear to dislike children whose activity levels are significantly different

from their own. Instead, older children are less accepting of low activity levels than are younger children.

Comparisons Among Relationships and Temperamental Characteristics

The fact that activity level is differentially related to friendships and best friendships suggests that activity level plays different roles within these two types of relationships. Similarity in activity level appears to be a requirement for a best friendship no matter what age children are within the preschool years. In contrast, friendships appear to depend more on similarity in activity level as children get older. These findings suggest that younger children, while they must match their best friends on activity level, tend to develop more casual friendships with children of varying activity levels. Older children, however, may not even develop friendships with children whose activity levels differ significantly from their own.

Children's activity levels did not predict the activity levels of their least liked peers, suggesting that this temperamental characteristic plays decidedly different roles in relationships children have with their friends in comparison to those they have with their least liked peers. The differences in the models for least-liked peers and liked peers (friends and best friends) imply that activity level played a role in children's choices of friends, but that least-liked peers were not disliked on account of their activity levels.

Similar levels of impulsivity are characteristic of friendships, but not best friendships. Perhaps best friends are chosen based on other criteria, such that impulsivity does not play an important role in the formation of best friendships. In (non-best) friendships, on the other hand, impulsivity may play a greater role, such that friendships may be formed more often between peers who have similar levels of impulsivity. The implication here is that a larger range of impulsive behavior can be tolerated in a best friendship than in a non-best friendship. Best

friendships may be more stable, and thus able to withstand more dissimilarity of impulsivity than are non-best friendships.

Past studies have found that preschool-aged children are beginning to learn impulse control (McCormick & Schnobrich, 1970). The results for impulsivity replicate this pattern, suggesting that as children age, they become less impulsive. A general decline in children's levels of impulsivity over the preschool years may mean that similarity or dissimilarity in impulsivity between two children is not the basis for friendship or for disliking a peer at this age.

Soothability appears not to be a temperamental characteristic on which children choose friends similar to themselves. Older children, more than younger children, tend to have friends, best friends, and least-liked peers who are soothable, regardless of their own soothability level. This finding suggests that children in general are becoming more soothable during preschool and that soothability does not play a significant role in preschool children's choice of friends or disliking of peers.

Conclusions

The results of this study suggest that similarity on activity level is more important to preschool friendship than similarity on impulsivity or soothability. Activity level may be salient to preschool children given that children's friendship choices at this age are frequently described as a function of engaging in common activities (e.g. Furman & Bierman, 1983). Developmental changes in impulsivity and soothability over the course of early childhood may make these characteristics less relevant to variations in the qualities of children's peer relationships. In summary, preschool children's choices of best friends, friends, and least-liked peers appear to be moderately related to some aspects of personality.

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Table 1

Summary of Regression Analyses for Best Friend (N = 73)

Predictor Variable	R^2	B	SE B	β
Activity Level				
Activity Level	.11*	.32	.11	.33*
Impulsivity				
Age	.19**	.07	.02	.44**
Soothability				
Age	.11*	.04	.01	.34*

*$p < .005$ **$p < .001$

Table 2

Summary of Regression Analyses for Friend (N = 73)

Predictor Variable	R^2	B	SE B	β
Activity Level				
Activity Level	.21**	.31	.09	.38**
Age x Activity Level		.03	.01	.22**
Impulsivity				
Impulsivity	.23***	.27	.10	.30**
Age		.04	.02	.28*
Soothability				
Age	.19***	.05	.01	.44***

*p < .05 **p ≤ .01 ***p ≤ .001

Table 3

Summary of Regression Analyses for Least-Liked Peer (N = 73)

Predictor Variable	R^2	B	SE B	β
Activity Level				
Age	.15**	-.07	.02	-.38**
Impulsivity				
Age	.09*	.05	.02	.29*
Soothability				
Age	.05+	.03	.02	.22+

+p < .07 *p <. 05 **p ≤ .01